



Letter to the Editor

Identifying the sexual dimorphism of deciduous dentition in a paediatric South Indian population



Journal of Forensic and Legal Medicine is one of the leading international journals in the subject category 'Medicine, Legal', and high quality articles published in the journal constantly update the readers on the latest researches in the field. While going through recently published articles in the journal, we came across a research article entitled "Identifying sexual dimorphism in a paediatric South Indian population using stepwise discriminant function analysis".¹ Though the title suggested of dealing with the issue of sexual dimorphism, it did not give the slightest clue as to an equally important aspect of identifying sexual dimorphism 'from what?' i.e. if the material utilized was osteological, dental or human remains in general. Though the title to a text is authors' prerogative,² it should appropriately justify the text.

More importantly we have reservations on the conclusions drawn in the study. The authors state that 'the right upper first molar was the most dimorphic tooth and the upper first molar of the left side was the least dimorphic of the six teeth studied'. The conclusion is based on the dimorphic ranks shown in Table 3 of the paper. It seems that the authors' have inappropriately presumed the negative values as lower ranks. The negative values obtained for teeth '63' and '64' are in fact indicative of the higher mesio-distal diameters for these teeth among females than males. The first molar on the left side in fact should rank 3rd in the list while it is the tooth '55' that exhibits minimal sexual dimorphism in the study.

The authors' state that the predictor variables included in the discriminant function was based on greatest univariate discriminant coefficient. It is desirable to show these results for a better understanding and applicability of the research. Similarly, while MD diameter and BL diameter were measured for all the teeth to identify the sexual dimorphism, dimorphic ranks are shown only for the MD diameter. Besides, we have serious doubts about the level of significance shown in the study with regard to the comparison of the predictor variables of teeth between males and females. For instance, MD diameter for '65' does not show significant sex differences ($t = 2.987$, $p = 0.244$) but is assigned 2nd rank based on

percentage of sexual dimorphism and also finds a place in the best discriminant function.

The present correspondence highlights on the very obvious errors in the published article. These errors need urgent attention and clarifications for establishing the scientific utility of the research.

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The authors have no conflict of interest to declare.

References

- Shankar S, Anuthama K, Kruthika M, Kumar VS, Ramesh K, Jaheerdeen A, et al. Identifying sexual dimorphism in a paediatric South Indian population using stepwise discriminant function analysis. *J Forensic Leg Med* 2013;20(6):752–6.
- Kanchan T. Title to a text is author's prerogative. *Burns* 2010;36(3):438–9.

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